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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/631,831	08/01/2003	Damien Michel Andre Camelot	069818-1301	1704
,	7590 03/29/2007 LARDNER LLP	EXAMINER		
SUITE 500			PRATT, HELEN F	
3000 K STREET NW WASHINGTON, DC 20007			ART UNIT	PAPER NUMBER
	,		1761	
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MONTHS		03/29/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

			<del></del>				
Office Action Summary		Application No.	Application No. Applicant(s)				
		10/631,831	CAMELOT ET AL.				
		Examiner	Art Unit				
		Helen F. Pratt	1761				
Period f	<sup>7</sup> - The MAILING DATE of this communication reply	on appears on the cover she	et with the correspondence ad	dress			
WHIII - Extended after a	HORTENED STATUTORY PERIOD FOR CHEVER IS LONGER, FROM THE MAILI ensions of time may be available under the provisions of 37 or SIX (6) MONTHS from the mailing date of this communica or period for reply is specified above, the maximum statutory ure to reply within the set or extended period for reply will, by reply received by the Office later than three months after the patent term adjustment. See 37 CFR 1.704(b).	NG DATE OF THIS COMMI CFR 1.136(a). In no event, however, m tion. y period will apply and will expire SIX (6) by statute, cause the application to become	UNICATION.  lay a reply be timely filed  MONTHS from the mailing date of this come ABANDONED (35 U.S.C. § 133).				
Status		•					
1)[	Responsive to communication(s) filed or	n 21 March 2007.					
′=		This action is non-final.					
′=	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
7,—	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposit	ion of Claims						
· <u>·</u>		in the application					
7/23	Claim(s) <u>1-16 and 18-27</u> is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.						
5)[	Claim(s) is/are allowed.	itildiawii iioiii consideration	•				
· · · · · ·	Claim(s) <u>1-16, 18-27</u> is/are rejected.						
	Claim(s) is/are objected to.						
	Claim(s) are subject to restriction	and/or election requirement		•			
		and/or election requirement					
	ion Papers						
	The specification is objected to by the Ex						
10)	The drawing(s) filed on is/are: a)[	☐ accepted or b)☐ objected	to by the Examiner.				
	Applicant may not request that any objection						
_	Replacement drawing sheet(s) including the						
11)	The oath or declaration is objected to by	the Examiner. Note the attac	ched Office Action or form PT	O-152.			
Priority	under 35 U.S.C. § 119						
	Acknowledgment is made of a claim for fo	oreign priority under 35 U.S.	C. § 119(a)-(d) or (f).				
a)	☐ All b)☐ Some * c)☐ None of:						
	1. Certified copies of the priority docu						
	2. Certified copies of the priority docu		· · · · · · · · · · · · · · · · · · ·	•			
	3. Copies of the certified copies of th		een received in this National S	Stage			
* (	application from the International E						
- 3	See the attached detailed Office action for	a list of the certified copies	not received.				
Attachmen	t(s)						
_	e of References Cited (PTO-892)	A) 🖂 Intoné	iew Summary (PTO-413)				
2) 🔲 Notic	e of Draftsperson's Patent Drawing Review (PTO-9	48) Paper	No(s)/Mail Date				
	mation Disclosure Statement(s) (PTO/SB/08)		of Informal Patent Application				
Pape	r No(s)/Mail Date	6) L Other:	··				

Art Unit: 1761

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-16, 18-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chung et al. (EP 0699392 A2) or Wu et al. (6,153,236) or Percel et al. (4,537,784). in view of Borsook et al. and Schouten.

Chung et al. disclose that it is known to coat solid acids in powder form in a fluidized bed apparatus (page 5, lines 22-30). Also, Wu et al. disclose that it is known to encapsulate lactic acid in a low melt oil (abstract and Col. 1, lines 30-31). Percel et al. disclose that it is known to plate lactic acid onto a calcium lactate carrier, which is encapsulated. This process is seen to make a dry lactic acid, which is seen to have been crystalline. Claims 1 and 2 differ from the reference in the use of crystalline lactic acid particles (CLAP). However, Borsook et al. disclose that crystalline LA is well known. Schouten discloses the structure of CLAP. As it is known to coat other solid acids in a fluidized bed apparatus, it would have been obvious to coat LA also since it can be in a crystalline solid form. Claim 1 further requires that the composition containing a wetting agent. However, Percel et al. disclose a composition containing 50% lactic acid as (anhydrous) to 50% carrier in which the carrier is calcium lactate which is disclosed as a wetting agent in claim 6 (col. 3, lines 1-24). The lactic acid is seen as being crystalline as it is anhydrous and if it is on a carrier no water is seen to

Art Unit: 1761

make it not crystalline. Also, Percel et al. disclose that it is known to use silicon dioxide (wetting agent) as a substrate when plating LA. (col. 10, lines 5-35). Therefore, it would have been obvious to use a known type of silica in the claimed composition.

Therefore, it would have been obvious to use a wetting agent in a crystalline lactic acid composition as shown by Percel in the composition of the combined references.

CLA is disclosed by Schouten as in claim 3 and the use of oil in claim 4 is disclosed by Wu et al. (abstract). The melting point of oils is generally between the claimed range as in claim 4 (col. 4, lines 20-30). Therefore, it would have been obvious to use oils at within the claimed melting points as disclosed by Wu and Schouten in the composition of Chung et al. and Wu et al.

Claim 8 further requires the use of partially hydrogenated palm oil which melts at 61 C for the encapsulating agent. Such oils are disclosed by Wu et al. (col. 4, lines 1-30). Therefore, it would have been obvious to use a known oil in the claimed composition.

Claim 9 further requires up to 95% LA. Certainly, the above references contain various amounts under 95%.

The coating materials are seen to contain various amounts of coating material and wetting agents. The various amounts are seen to have been within the skill of the ordinary worker. Therefore, it would have been obvious to use various amounts of materials in the composition.

Nothing is seen as in claim 12 that the LA of the combined references is not dispersable in water in 60 minutes.

Art Unit: 1761

Wu et al. discloses that LA can be used in sausage as in claims 13 and 14, 16 (col. 7, lines 55-65).

The stability of a food product would have been enhanced as in claim 15, since the LA is an acid, which is known to reduce the pH of foods thereby increasing the shelf life of food. Claim 15 has been amended to require a wetting agent, which has been shown as known as above. Therefore, it would have been obvious to use CLAP in food products just as LA was used as shown by the combined references.

Claims 18, 20-21 are to the method of coating LA crystals which has been shown by the combined references. As it is known to make crystals of LA, and it is known to coat liquid, LA, and it is known to coat solid acids, it would have been obvious to use known methods to coat solid acids as shown by Chung et al. Also, Percel et al. disclose that it is known to combine anhydrous lactic acid, which is seen to be crystalline absent a showing or arguments to the contrary. The acid is combined or plated with calcium lactate (wetting agent) and then encapsulated with fat (col. 3, lines 1-31). Therefore, it would have been obvious to use the wetting agent in the process of the combined references as shown by Percel et al.

The limitations of claims 22-27 have been disclosed above and are obvious for those reasons.

The particular micron size is seen to have been within the skill of the ordinary worker depending on the use of the CLAP as in claim 19 and fluidized coater are disclosed by Chung et al. (page 5, lines 18-25). Therefore, it would have been obvious to coat a solid acid as shown by Chung et al.

Art Unit: 1761

## **ARGUMENTS**

Applicant's arguments filed 3-21-07 have been fully considered but they are not persuasive. Applicants argue that the replacement of lactic acid with crystalline powdered lactic acid is now possible. However, the reference to Percel et al. use lactic acid which is sprayed onto the calcium lactate and coated with a lipid. The lactic acid is anhydrous. Nothing is seen that anhydrous lactic acid is not crystalline, since the water is removed. Then the calcium lactate is seen to absorb any further amount of water (col. 3, lines 1-24). Also the reference discloses that some flashing off of water occurs, which is seen to also make a crystalline product. No weight is given to the method of producing a crystalline product in a composition claim.

Applicants argue that Chung describes coating leaving acid cores, but not lactic acid specifically, and that it could not have been substituted for the powders of the reference. This is not seen as crystalline lactic acid is known as disclosed by Schouten et al.

As to Wu, applicants argue that the reference uses liquid lactic acid. However, the first claims are composition claims, which make a dry product, which is seen to contain crystalline lactic acid, as nothing has been shown that it is not crystalline.

As to Borsook and Schouten, they are used in combination with the other references. As it is known to encapsulate other crystalline acids, it would have been obvious to encapsulate crystalline lactic acid.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 1761

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helen F. Pratt whose telephone number is 571-272-1404. The examiner can normally be reached on Monday to Friday from 9:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Milton Cano, can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

Art Unit: 1761

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Hp 3-27-07

HELEN PRATT PRIMARY EXAMINER

Page 7